

- 17 -

## ABSTRACT

An apparatus for fabricating a unique non-woven fabric which has the appearance of a woven fabric includes a supply station for adhesive coated parallel warp yarns, a support structure for orienting the parallel warp yarns into a cylindrical orientation with the adhesive coating on the outside, a weft yarn applicator for wrapping weft yarns around the cylindrically oriented warp yarns, a heating station for activating the adhesive and a cooling station for setting the adhesive, and a cutter for severing the cylindrically formed fabric composite so that it can be flattened and wrapped onto a take-up roller. The weft yarn applicator includes a rotating drum wherein a plurality of spools of weft yarn material are mounted in circumferentially spaced relationship. Tension on the weft yarns is provided by the rotation of the drum (centrifugal force) and a stationary conical aligner is used to guide the weft yarn material onto the warp yarns in substantially perpendicular alignment.